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Bedford

Reports on Artificial Anatomy
of Dr. Auzoux



REPORTS
ON
THE ARTIFICIAL ANATOMY
OF
DR. AUZOUX,

PROFESSOR OF ANATOMY AND PHYSIOLOGY; CHEVALIER OF THE
LEGION OF HONOUR, ETC., ETC., ETC.

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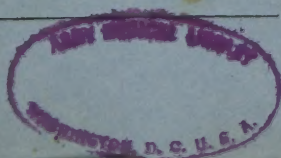
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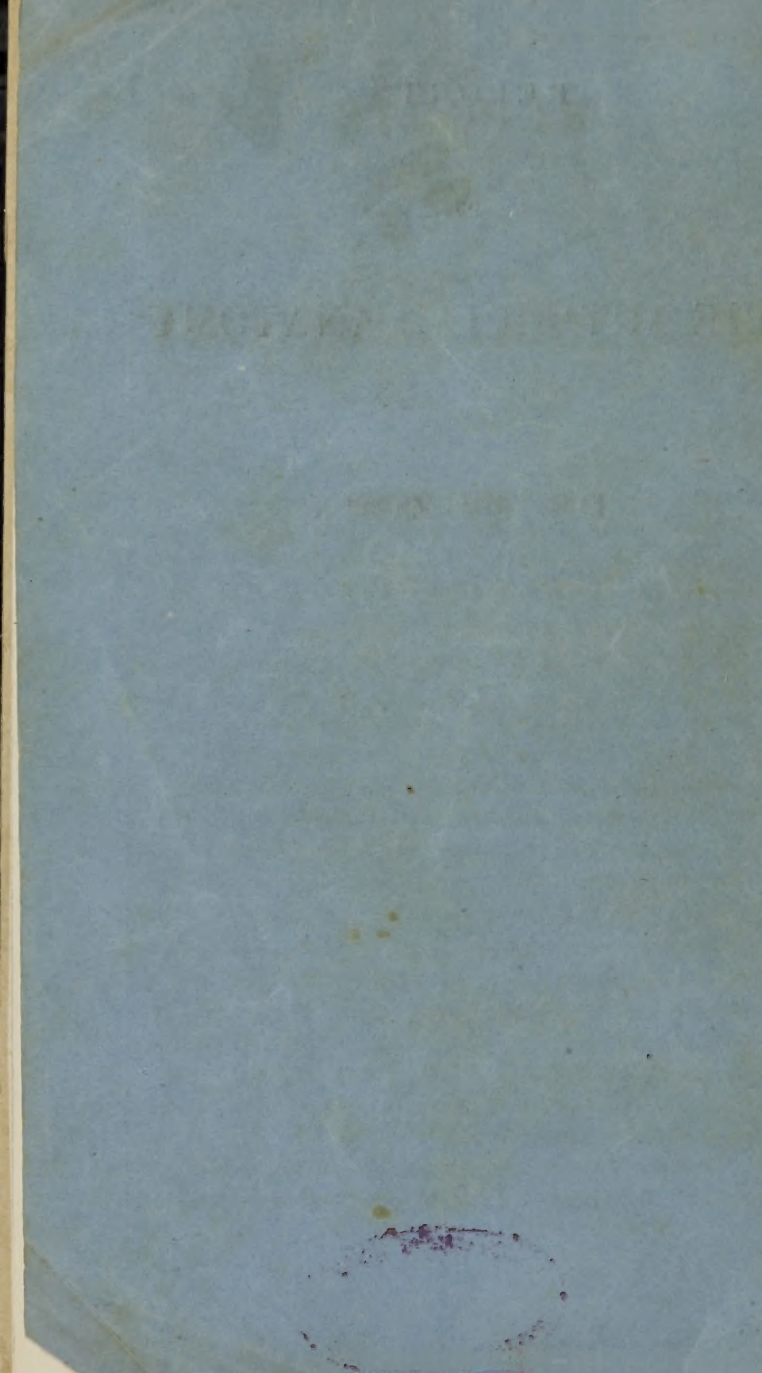
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PREFACE.

IN presenting the following Reports, made to the learned societies in France, respecting the merits of Dr. Auzoux's splendid Artificial Anatomy, I wish merely to remark, that the names of the gentlemen forming the various committees, are among the first that France has produced in any age. It is unnecessary for me to dilate on the excellencies or public utility of this most extraordinary piece of mechanism; it carries with it the impress of its own value. Anatomy can now become the pursuit of all,—and the time approaches when no individual will be considered as having completed his education without previously having learned something of the philosophy of his wonderful mechanism. Dr. Auzoux has succeeded in throwing a fascination around the study of Anatomy, which it never before possessed: free as he has made it from the loathesomeness of the dissecting room, it can be pursued by all classes of society without the fear of encountering the putrescent atmosphere of the dead. It shall be my effort to make Anatomy tributary to public instruction; and with this view, I shall devote my leisure hours in explaining the beauties and wonders of our physical organization.

Private Classes will be formed for Students of Medicine. Gentlemen, not of the medical profession, and

who are anxious to have a more minute knowledge of Anatomy than is consistent to present to a popular audience, will be arranged in classes, and instructed in the details of anatomical and physiological science.

Classes will also be formed for members of the legal profession, who now will have an opportunity of acquiring, in a short time, such knowledge of the human structure as will essentially aid them in all questions of medical jurisprudence.

G. S. BEDFORD, M. D.

For further particulars apply at 695 Broadway.

New-York, April 1st, 1840.

REPORT

MADE TO THE ROYAL ACADEMY OF MEDICINE,

BY

MESSRS. ADELON, ANTHONY DUBOIS, RIBES, H. CLOQUET,
CRUVEILHIER, BRESCHET AND BAFFOS.

Session, 10th May, 1831.

GENTLEMEN,

IN the years 1822, 1823, and 1825, M. Auzoux submitted to your examination specimens of Artificial Anatomy, intended to represent the different parts which enter into the composition of the human body.

You appointed, in order to render you an account of the labours of our colleague, Messrs. Dumeril, Bèclard, H. Cloquet, Desgenettes, Breschet, Richerand, and Allard. This committee, fully capable by their profound attainments, to discharge the trust reposed in them, stated to you their opinion as to the great importance of M. Auzoux's discovery, and invoked for its distinguished author your thanks; they observed, likewise, that M. Auzoux was entitled to the encouragement which the French Government always accorded to those who do honor to their country. "*France*," in the language of M. Allard, "*has this day the advantage of surpassing all other nations in the art of Anatomical Imitations.*"

Your favorable opinion, gentlemen, has been confirmed by the extraordinary anxiety evinced by the public institutions of almost all civilized countries to obtain this wonderful Preparation. Your elogiums and the avidity with which these specimens have been sought after by Foreigners, have given a new impulse to the zeal of our colleague. We transcribe, with great pleasure, what was said in 1823 by the Medical Society of Emulation.— "We cheerfully accord to M. Auzoux the thanks due to his zeal in the cause of science;—his patience, his ingenious essays, and the brilliant results accomplished by his perseverance and profound knowledge of Anatomy."

After five years of arduous toil, M. Auzoux submitted to the Academy, at its session of 25th May, 1830, a new specimen of Anatomy, for the examination of which you appointed Messrs. A. Dubois, Ribes, Adelon, Cruveilhier, Breschet, H. Cloquet, and myself.

It was not to any slight modifications, or additions of little importance, that our colleague devoted himself; he so far remodeled his previous efforts that nothing was preserved but the *modus faciendi*. M. Auzoux has designed an Adult, five feet six inches in height, and imposed upon himself the task of delineating the minutest details of our physical structure.

This new model, compared with what he had yet done, or even with the complete specimen submitted to your examination in 1825, and which was deemed worthy of high praise, presents, nevertheless, such great improvements, that it is difficult to conceive it to be the work of the same artist. The forms have been completely changed, the details more than doubled; and by means of ingenious sections, M. Auzoux has succeeded in exhibiting all that relates to myology, angeology, neurology, and splanchnology; even the bones themselves are so naturally represented, that it is not easy to distinguish them from the veritable bones of the Cadaver. The minutest parts of the human system—the most delicate as also the most voluminous—the soft as well as the hard—the superficial and profound—are exhibited with the greatest accuracy in their forms, colors, and connections. We do not consider it necessary to enter into an analysis of all these details; we prefer, rather, to draw your attention to certain parts, which have more especially attracted the notice of your committee.

The representation of the Heart is exceedingly happy; by means of a section made in the inter-auricular and inter-ventricular partition, this organ is divided into two halves: upon each half are two cavities, which may be opened so as to bring into view the valves—all these parts re-unite so exactly, that the traces of division can scarcely be recognized—and in the entire they exhibit a heart of the natural size, whence are seen the vessels, which either originate from this organ or are returned to it. All these vessels being traced from their origin to their termination it is easy to study their different branches, their numerous anastomoses, and their relations with the different organs.

The preparation of the Head, in which are found the mouth, pharynx, larynx, and nasal fossæ, with the muscles, arteries, veins, and nerves, which accompany these parts, or which are distributed there, has appeared to your committee to offer an accuracy in detail which has never been equalled.

The Brain, Spinal Marrow, and Great Sympathetic Nerve, have been represented with all their details in so perfect a manner as to leave nothing to be desired.

Your committee are happy in being able to announce the entire realization of the hopes, which you were induced to cherish, not only by the reports of preceeding committees, those of the Royal Academy of Sciences, and of the Medical Society of Emulation, but by the testimony of many distinguished physicians whose opinions had been requested.

M. Auzoux has rendered a great service to practitioners, who,

after having completed their studies on the *Cadaver*, will be enabled to review in a very brief time all that they had previously learned. Surgeons remote from large cities will be especially benefitted by the opportunity afforded them of studying the relations of the various parts.

This preparation will be of essential utility in public demonstrations. In Schools of Anatomy, for example, where there is a deficiency of subjects, the professor can describe the course and relation of blood vessels, nerves, &c.

There is a natural repugnance to the study of Anatomy in persons who are not called to it by the necessity of their profession. However, for years past it has been desirable that the youth of our country, in completing their education, should have some idea of human organization. The utility of this study has been felt by the Prince whom France has called to the throne—by his particular desire his son prosecuted a course of Anatomy.

Your committee, gentlemen, have the honor to suggest that thanks be returned to M. Auzoux, with the assurance that the Royal Academy is well satisfied with his labours, and that he be included in the approaching election. The committee further propose, that the present report be sent to the Minister of the Interior, with the opinion that these preparations should be introduced into the Royal Colleges, Schools of Medicine, and other public establishments.

The Academy, moreover, voted that one of M. Auzoux's preparations be purchased and placed in the Session Chamber.

Perpetual Secretary of the Royal Academy of Medicine,
(Signed) PARISSET.

Paris, 10th May, 1831.

The Royal Academy adopted the report and its conclusions.—It remarked, however, that the committee had not insisted sufficiently on the advantages of M. Auzoux's preparation in warm climates; that if it were useful to students, practitioners, and scientific men in those countries in which human dissections were comparatively easy, it was of indispensable necessity in those latitudes in which the dissection of the dead could not be prosecuted without compromising the health of the living.

(Signed) GUENEAU DE MUSSY,

10th May, 1831.

REPORT

By M. A. PASSY, to the Consul General.

SESSION OF 1835.

I wish to apprise you of a new and singular enterprize, which has just enriched this department. Doctor Auzoux has estab-

lished manufactories for the making of Anatomical preparations in his native place, St. Aubin d' Ecrôville. He employs sixty work people, of all ages; and with their ordinary labour, consisting of painting and sculpture, he unites particular instructions, which, together with his assiduous care, serve at once to develop the intelligence and morality of those he employs.

If a stranger were accidentally to visit his manufactories, remote as they are from large cities, and ask what object was to be answered by the industrious efforts of those around him, he would be astonished to learn, that, in the midst of the forest as it were, people were devoting themselves to the most extraordinary and learned occupation. If he were to enter the workshops, he would hear the pure language of Anatomy; he would be amazed to find children explaining the most surprising operations of the mechanism of life.

I would propose that the sum of three thousand francs be appropriated for the purchase of an Anatomical Preparation of M. Auzoux; that it be placed in the Amphitheatre of this city, and be used in the public demonstrations of Anatomy.

REPORT

By M. Baron CHARLES DUPIN, Member of the Institute, to the Central Committee on the Products of French Industry.

The study of Anatomy is an object of disgust to the generality of people, and contact with the dead subject, loathsome to all, prevents those not of the medical profession from prosecuting the interesting subject of human Anatomy.

M. Auzoux, for public lectures and isolated study, has superseded, by a composition at once flexible and solid, which receives and preserves the most delicate impressions, the necessity of encountering the impurities of the dissecting room; he has exhibited, by sub-divisions extremely numerous, the different parts of the human body, which, collectively, present in the most perfect manner natural man.

In its *ensemble*, this preparation presents the Anatomical Subject deprived of the integuments and cellular tissue; and exhibits true to life the muscles, aponeuroses, cartilages, nerves, viscera, and blood vessels, with their form, colour, and natural positions.

In the examination in detail, each piece, retained by two clasps, is removed, and presents separately the limb, organ, viscus, muscle, nerve, or blood-vessel, which it may be desirous of examining. The heart and brain are susceptible of being opened and examined in their minutest structures, and their entire interior is fully revealed.

The Academies of Science and Medicine have passed high encomiums upon this admirable production, so justly appreciated by foreigners. In Great Britain, the invention of M. Auzoux has sufficed to have revoked, as hereafter useless, the law which prevents the selling of dead bodies, a law which has given rise to the most atrocious crimes. The French Government have caused these inimitable preparations to be placed in the Military Hospitals of Instruction, and in the majority of the Schools of Medicine; and their usefulness has been extended to the colonies. Numbers of these models have been ordered for Russia, Turkey, the East and West Indies, Italy, Mexico, St. Domingo, and they have served to found Schools of Medicine in Cairo, Constantinople, Persia, Syria, &c.

It will be readily shown, by the following fact, with what rapidity the knowledge of Anatomy is extending itself: the workmen employed by M. Auzoux, even the most illiterate, are all in a condition to teach this science. One of his pupils, taken from the country to work at his preparations, and who scarcely knew how to read, has become in three years a learned Anatomist: he now resides at Cairo, and is eminently distinguished—he is not yet twenty years of age.

The preparation of M. Auzoux will enable Professors to impart the highly interesting science of Anatomy to the people at large.

At the last exhibition of the products of French industry, the wonderful models of M. Auzoux were submitted to public examination. They were objects of great attention on the part of the King, the Members of the Council, of all the public journals, and especially of the citizens, whose anxiety to examine the preparations was such, that the Administration was under the necessity of adopting measures to check the impulse which M. Auzoux's happy and natural delineation of the human subject had created.

ACADEMY OF SCIENCES.

SESSION, 10th April, 1835.

Extract from the Report by Messrs. PORTAL and DUMÉRIL.

It is extremely desirable that the people generally should know something of their wonderful organization. Can it be supposed that an educated man of the present day would be content to remain ignorant of the manner and means of his various movements, and of the organs by which his sensations and principal functions are produced? All this can be learned, without encountering the loathsomeness of the dissecting room, from the admirable preparation introduced to the public by M. Auzoux. No one can now complain that he does not enjoy abun-

dant opportunity to become intimately acquainted with the intricacies of his own extraordinary mechanism.

ROYAL INSTITUTE OF FRANCE.

*Extract from the Report of Messrs. BOYER, SERRES, and
GEOFFROY SAINT-HILAIRE.*

A general knowledge of the parts comprising the human system will one day form an important branch of education among all classes of society. Sooner or later this will be insisted upon; but in no way can this study be adapted to the people at large but through the resources of the splendid invention of M. Auzoux.

OPINION OF PROFESSOR LÆNNEC,

Addressed to the Minister of the Interior.

I have examined in detail the Artificial Anatomy of M. Auzoux, and I can attest to its excellence as well as utility. If its originator could place it at a price which would enable the various Anatomical Theatres to provide themselves with it, the following advantages would result:—

1.—The time ordinarily allotted to the study of Anatomy would be considerably abridged.

2.—There would be a great diminution in the number of subjects necessary for dissection, for the student having previously become thoroughly acquainted with the form and relations of the various organs by studying the preparation of M. Auzoux, could soon perfect himself on the Cadaver.

3.—The student would have an opportunity of refreshing his recollection with regard to the various points in Anatomical science, which he may have forgotten.

4.—The entire freedom of this Preparation from the loathsomeness of the dissecting room, would prove attractive to such pupils as are not over zealous in their labours.

(Signed) AG. LÆNNEC, D. M.,

Professor in the Medical Society of Paris, and in the College of France.

CONCLUSIONS.

The following conclusions are derived from the Reports which have been made with regard to my Artificial Anatomy to the

Royal Academy of Medicine, to the Institute, and to the Medical Society of Emulation:—

1.—That this Preparation has the advantage of abridging the time usually devoted to the study of Anatomy.

2.—That it furnishes to students and practitioners an opportunity of renewing their knowledge of this interesting study.

3.—That it will render the study of Anatomy practicable to all classes of society.

4.—It will furnish the means of prosecuting Anatomical researches in those countries in which the warmth of the climate, or the prejudices of the people, are adverse to human dissection.

5.—It affords the opportunity of studying Anatomy during all seasons of the year and under every circumstance.

6.—It exhibits, at the same time, and on the same subject, in the standing position, all the parts which enter into the composition of the human body, together with their natural colour, relations, situations, figure, extent, and attachments.

7.—It contributes to the perfection of the fine arts, by rendering the study of Anatomy less disgusting and more easy.

8.—It is capable of accomplishing the hopes long since expressed by learned men, who have devoted themselves to the education of youth, that the *study of Anatomy should form a part of public instruction*. Such were the wishes of Decartes, Montesquieu, Bossuet, Demarsais, and of all those whose business it has been to preside over public instruction.

M. AUZOUX.

*The following is an Extract from a *Letter written by*
DR. HARLAN, of Philadelphia, dated—Paris, May
10th, 1839.

“Among the improvements in Anatomy, I ought to mention the gratification that I experienced in attending the lectures of Dr. Auzoux, who, for the benefit of the fastidious, has succeeded in divesting Anatomy of all its disgust and horror, and rendered it a pursuit even for ladies; a number of the most respectable of whom were constant attendants of his demonstrations, which are made entirely from artificial subjects, in which each portion is separate, marked with names or numbers, and in which there is one advantage it possesses over the real subject—that all the relative positions of muscle, tendon, nerve, blood-vessel, and bone are beautifully displayed.”

* See Medical Examiner, No. 28, vol. 2.

